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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,373	02/07/2001	Ronald E. Pelrine	SRI1P029	7984
22434	7590	04/09/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 778 BERKELEY, CA 94704-0778			BUDD, MARK OSBORNE	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/779,373

Applicant(s)

PELRINE ET AL.

Examiner

Mark Budd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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Claims 6 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are vague, indefinite and confusing. In claim 6, there is a contradiction in claiming what was previously a second portion of a first electro-active polymer as now part of a second electro active polymer. Portions of something can only be subdivisions of the same thing. In claim 11, either there are three portions (first, second and third) or not. Equating a third portion as actually being the second portion is confusing and inaccurate. (there would then be only two portions).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 15-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Yoshida, Yamamuro or Edelman.

Each reference teaches a piezoelectric polymer transducer with appropriate electrodes and a structure coupled to transfer mechanical input energy to a first portion of the transducer. Note especially Yamamuro (figs. 7-13), Yoshida (Figs. 3 & 4) and Edelman (Fig. 2). Courts have found that claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly 263 (F.2d 844. Apparatus claims cover what a device is not what it does. Hewlett-Packard v Pausch & Lonb 90 F. 2d 1464. Functional phrases not supported by

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sufficient structure in the claims for performing the specified function to warrant the functional language are not given patentable weight. In re Fuller C.D. 172; 388).G. 279. Thus, specifically the "wherein phrases of claims 2-4, 15, 19 and 20 ("is arranged such that "for claim 20).

Claims 5-7 are rejected under 35 U.S.C. 102(a) as being anticipated by Yamamuro or Edelman.

In Edelman, or Fig. 2 Edelman anything to the left of #16 is a first portion, and anything to the right of #16 is considered a second portion.

In Yamamuro, e.g. fig. 7, left of #16 is second portion.

Claims 8-14 and 22-25 are rejected under 35 U.S.C. 102(a) as being anticipated by Yamamuro.

Note figs. 8-10 of the reference teaches expansion of one portion (e.g. #31a) with a corresponding contraction of another portion (e.g. 31b). See Yamamuro col. 7, In 10 to col. 8 In 19.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamuro.

These claims provide a limit or stop mechanism not shown by Yamamuro. However, providing an over-bend protection for piezoelectric elements to protect them

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from self destruction via mechanical shock etc is well known per se (Official notice taken). Thus to provide such a structure for its known intended function would have been obvious to one of ordinary skill in the art.

Claims 28-37 are allowed.

Budd/ds

03/25/04


MARK A. BUDD
PRIMARY EXAMINER
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